CLAIM AMENDMENTS

1. (currently amended): A biodegradable multi-block copolymer, comprising ~~at least two~~ randomly arranged hydrolysable segments ~~derived from pre-polymers A and B~~ each composed of pre-polymer A or pre-polymer B, which segments are ~~linked by a~~ randomly connected to each other by multi-functional ~~chain extender~~ chain extenders,-

~~wherein said segments are selected from the group consisting of pre-polymer A, pre-polymer B, the triblock ABA, and the triblock BAB,~~ and

wherein the multi-block copolymer is amorphous at physiological (body) conditions.

2. (previously presented): A copolymer of claim 1, which has a glass transition temperature below body temperature at physiological (body) conditions.

3. (previously presented): A copolymer of claim 1, wherein pre-polymer A and/or pre-polymer-B contain ester and/or carbonate and/or anhydride linkages, optionally in combination with polyethers.

4. (previously presented): A copolymer of claim 1, wherein pre-polymer A comprises polyether groups.

5. (previously presented): A copolymer of claim 1, wherein a polyether is present as an additional pre-polymer.

6. (previously presented): A copolymer of claim 1, wherein pre-polymer A comprises a reaction product of an ester forming monomer selected from the group consisting of diols, dicarboxylic acids and hydroxycarboxylic acids.

7. (previously presented): A copolymer of claim 1, wherein pre-polymer A comprises reaction products of at least one cyclic monomer with at least one non-cyclic initiator selected from the group consisting of diols, dicarboxylic acids and hydroxycarboxylic acids.

8. (previously presented): A copolymer of claim 7, wherein said cyclic monomer is selected from the group consisting of glycolide, lactide (L, D or DL), ε-caprolactone, δ-valerolactone, trimethylene carbonate, tetramethylene carbonate, 1,4-dioxane-2-one (*para*-dioxanone), 1,5-dioxepane-2-one and cyclic anhydrides.

9. (previously presented): A copolymer of claim 8 wherein pre-polymer A contains at least two different cyclic monomers.

10. (previously presented): A copolymer of claim 9 wherein pre-polymer A consists of glycolide and ε-caprolactone in a 1:1 weight ratio.

11. (previously presented): A copolymer of claim 9 wherein pre-polymer A consists of glycolide and lactide in a 1:1 weight ratio.

12. (previously presented): A copolymer of claim 7, wherein said non-cyclic initiator is selected from the group of succinic acid, glutaric acid, adipic acid, sebacic acid, lactic acid, glycolic acid, hydroxybutyric acid, ethylene glycol, diethylene glycol, 1,4-butanediol and 1,6-hexanediol.

13. (previously presented): A copolymer of claim 4, wherein said polyether groups are selected from the group consisting of PEG (polyethylene glycol), PEG-PPG (polypropylene glycol), PTMG (polytetramethylene ether glycol) and combinations thereof.

14. (previously presented): A copolymer of claim 13, wherein the polyether group is PEG.

15. (previously presented): A copolymer of claim 14, wherein PEG is an initiator for ring-opening polymerization with a molecular weight between 150-4000.

16. (previously presented): A copolymer of claim 1, wherein pre-polymer A has a number average molecular weight (Mn) between 300 and 30000.

17. (previously presented): A copolymer of claim 1, wherein pre-polymer B comprises ε-caprolactone, δ-valerolactone, trimethylene carbonate, para-dioxanone, DL-lactide and/or glycolide.

18. (previously presented): A copolymer of claim 17, wherein pre-polymer B contains d,l-lactide.

19. (previously presented): A copolymer of claim 17, wherein pre-polymer B has a number average molecular weight (Mn) higher than 300.

20. (previously presented): A copolymer of claim 16, wherein pre-polymer B is present in an amount of 10-90 wt.%.

21. (previously presented): A copolymer of claim 1, having an intrinsic viscosity of at least 0.1 dl/g, and less than 6 dl/g.

22. (previously presented): A copolymer of claim 1, wherein the chain extender is derived from a difunctional aliphatic compound.

23. (previously presented): A copolymer of claim 22, wherein the chain-extender is a diisocyanate.

24. (canceled)

25. (previously presented): A process for preparing a copolymer of claim 1, comprising a chain-extension reaction of pre-polymer A and pre-polymer B in the presence of an aliphatic chain extender, whereby a randomly segmented multi-block copolymer is obtained.

26. (previously presented): A process for preparing a copolymer of claim 1, comprising a coupling reaction, wherein pre-polymers A and B are both diol or diacid terminated and the chain-extender is di-carboxylic acid or diol terminated, respectively, using a coupling agent.

27. (previously presented): The process of claim 26, wherein the coupling agent is dicyclohexyl carbodiimide (DCC).

28-29. (canceled)

30. (previously presented): The process of claim 25, wherein said chain-extender is selected from diisocyanate, di-carboxylic acid or diol, optionally in the presence of a coupling agent.

31. (previously presented): The process of claim 25, wherein said chain-extension reaction is performed in a solvent.

32. (previously presented): A medical implant which comprises the copolymer of claim 1.

33. (previously presented): A pharmaceutical composition for delivery of a bioactive agent comprising the copolymer of claim 1 loaded with said bioactive agent.

34. (previously presented): The composition of claim 33 wherein the bioactive agent is selected from the group consisting of amino acids, (poly)peptides, proteins, nucleic acids, polysaccharides, steroids, growth factors, antigens, chemotherapeutic agents, hormones, antibiotics, antivirals, antifungals, immunosuppressants, antihistamines, anticoagulants, antiphoto-aging agents, melanotropic peptides, anti-inflammatory compounds, antipsychotics, radiation absorbers, decongestants, neuroactive agents, anesthetics, sedatives, vitamins, diagnostics (including radioactive isotopes and fluorescent agents).

35. (previously presented): The medical implant of claim 32 selected from the group consisting of porous sponges, tubular devices, membranes, stents, a coating for a medical device, and a drug delivery vehicle.

36. (previously presented): The process of claim 27, wherein said chain-extender is selected from diisocyanate, di-carboxylic acid or diol, optionally in the presence of a coupling agent.

37-38. (canceled)

39. (previously presented): The process of claim 27, wherein said chain-extension reaction is performed in a solvent.

40-41. (canceled)